- 4. The educational toy of claim 1, wherein said line is connected to said frame at two pivots spaced apart, whereby said object coasts in the direction of a line between said pivots as a swing having essentially two parallel suspension arms spaced apart, and coasts in a direction perpendicular to said line between said pivots as a simple pendulum having just one suspension arm.
- 5. The educational toy of claim 1, wherein said suspension line is comprised of an elastic upper section connected to a flexible lower section, whereby said object falls freely for a period of time after being lifted and dropped, or after being pulled down and released and moving upwards to relax said flexible line, and said object both coasts and bounces freely when swinging horizontally.
- 6. The educational toy of claim 1, wherein an array of said sensors mounted on said object both sense and suppress the motion of said object by deflecting when accelerated, and by exerting forces on said object opposite to the direction it is moving.
- 7. The educational toy of claim 1 wherein said spring is a flat plastic beam, having one end connected to said mass, and the other end connected to a mounting-adapter block made of hard rubber material that connects to said object.
- 8. The educational toy of claim 1 wherein said sensor is comprised of said mass connected to one the end of a flexible line, and the other end connected to the bottom of said object; whereby gravity acting as a spring tends to restore said sensor to its neutral, vertical position.
- 9. The educational toy of claim 1 wherein said frame is a formed metal rod connected to a wood base block, whereby manually moving the top of said rod back and forth gradually builds up big swinging excursions of said object.

Yours truly,

•

Robert W. Lally

Robert Whally